



PROVISIONAL GEOLOGIC MAP OF THE
SMITHFIELD QUADRANGLE,
CACHE COUNTY, UTAH

by
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1993

Plate 1
Utah Geological Survey Map 143
Provisional Geologic Map of the Smithfield Quadrangle

Bedrock mapping by Galloway, 1967
Quaternary mapping by Lowe, 1983-84
Revisions by Jon King, U.G.S., 1993
P.H. Spenza, Cartographer

[illegible]

Qd ₀	Natural-levee deposits of the Bear River – fine sand to clay, overbank sediments deposited during flood stage.
Qal ₁	Alluvial deposits of the Bear River – fine clay to sand with some medium and coarse sand; channel deposits.
Qac ₁	Alluvial and colluvial deposits along axes of mountain drainages – boulders to clay, mixed colluvial, fluvial, and alluvial-fan deposits.
Qaf ₁	Younger post-Lake Bonneville alluvial-fan deposits – boulders to clay.
Qmf ₁	Debris-flow deposits – surficial deposits displaced downslope as a viscous slurry flow.
Qms ₁	Slump and landslide deposits – bedrock and surficial deposits displaced downslope.
Qmc ₁	Colluvial and slope-wash deposits – boulders to clay mantling bedrock.
Qal ₂	Older post-Lake Bonneville alluvial-fan deposits – boulders to clay.
Qlf ₃	Lacustrine offshore deposits – silt and clay deposited when Lake Bonneville stood at the Provo shoreline.
Qlc ₃	Lacustrine nearshore deposits – cobbles to fine sand deposited when Lake Bonneville stood at the Provo shoreline.
Qd ₃	Deltaic deposits – cobbles to fine sand deposited when Lake Bonneville stood at the Provo shoreline.
Qaf ₂	Alluvial fan deposits – boulders to clay; deposits are graded to Provo shoreline.
Qat ₃	Terrace deposits – cobbles to sand deposited by streams, graded to the Provo shoreline.
Qlf ₄	Lacustrine offshore deposits – fine sand, silt, and clay deposited when Lake Bonneville stood at the Bonneville shoreline.
Qlc ₄	Lacustrine nearshore deposits – cobbles to sand, deposited when Lake Bonneville stood at the Bonneville shoreline.
Qd ₄	Deltaic deposits – cobbles to fine sand deposited when Lake Bonneville stood at the Bonneville shoreline.
Qll ₄	Lagoon deposits – sand- to clay-size sediments deposited in lagoons when Lake Bonneville stood at the Bonneville shoreline.
Qat ₄	Terrace deposits – cobbles and sand deposited by streams, graded to the Bonneville shoreline.
Qms ₄	Slump and landslide deposits – bedrock and surficial deposits displaced downslope; poorly developed Bonneville shoreline cut on deposits.
Qaf ₃	Pre-Lake Bonneville alluvial-fan deposits – boulders to clay; only exposed in road cut.
Qap ₅	Pediment deposits – boulders to clay covering flat surfaces formed primarily on the Tertiary Salt Lake Formation.
Qnd	Boulder to sand deposits of unknown origin.

	CONTACT - dashed where approximate
	NORMAL FAULT - dashed where approximate; dotted where concealed; bar and ball on downthrown side; queried where existence uncertain
	THRUST FAULT - dashed where approximate; dotted where concealed; sawteeth on upper plate
	LOW-ANGLE NORMAL FAULT - dashed where approximate; dotted where concealed; sawteeth on upper plate
	TRACE OF AXIAL SURFACE OF FOLD - dashed where approximate
	anticline
	syncline
	TRACE OF LANDSLIDE SURFACE - dashed where approximate
	TRACE OF SLIDE-BLOCK SURFACE - dashed where approximate
	TRACE OF BONNEVILLE SHORELINE
	TRACE OF PROVO SHORELINE
BEDDING	
	inclined
	vertical
	overturned
	GRAVEL PIT
	QUARRY
	PROSPECT
	WATER WELL
	OIL AND GAS EXPLORATION WELL, DRY

